

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for processing data packets in a computer network, comprising:

configuring a multilayer switch to process data packets at wire-speed based on one or more user defined packet policies, each user defined packet policy specifying information for one or more of Layers 4 through 7 and being active during one or more specified date or time intervals;

receiving a data packet at the multilayer switch, the data packet including information from one or more of Layers 2 through 7 of the OSI model;

determining if there is a match between the data packet and one or more of the packet policies, each packet policy authorizing matching data packets to use the computer network;

if there is a matching packet policy authorizing the data packet, routing the data packet using a Layer 2-3 switch; and

if there is no matching packet policy authorizing the data packet, blocking the data packet.

2. (Currently Amended) The method of claim 1, wherein ~~the user defined packet policies include timed packet policies, the timed packet policies being active during specified date or time intervals, and~~ determining if there is at least one matching packet policy further comprises:

determining if there is a currently active timed matching policy.

3. (Original) The method of claim 1, wherein the user defined packet policies authorize data packets being transmitted or received by authorized users, applications, physical ports, application ports, IP addresses, or MAC addresses.
4. (Original) The method of claim 1, wherein blocking the data packet comprises:
discarding the data packet, logging the data packet, or forwarding the data packet to a multilayer switch application for processing.
5. (Original) A method for processing data packets in a computer network, comprising:
configuring a multilayer switch to process data packets at wire-speed based on one or more user defined packet policies, each user defined packet policy specifying information for one or more of Layers 4 through 7;
receiving a data packet at the multilayer switch, the data packet including information from one or more of Layers 2 through 7 of the OSI model;
determining if there is a match between the data packet and one or more packet policies that specify a second packet policy to be applied to the matching data packets, the second packet policy having one or more policy action fields; and
if there is a matching packet policy specifying a second packet policy, processing the data packet based on the policy action fields of the second packet policy.
6. (Original) The method of claim 5, wherein the matching packet policy specifies the application of a preexisting second packet policy, and processing the data packet comprises:
identifying the preexisting second packet policy specified by the matching packet policy;
and
processing the data packet based on the policy action fields of the preexisting second packet policy.

7. (Original) The method of claim 5, wherein the matching packet policy specifies the application of a dynamically created second packet policy, and processing the data packet comprises:

creating the second packet policy specified by the matching packet policy; and
processing the data packet based on the policy action fields of the created second packet policy.

8. (Original) The method of claim 5, wherein processing the data packet comprises:
routing the data packet using a Layer 2-3 switch.

9. (Withdrawn) A method for processing data packets in a computer network, comprising:
configuring a multilayer switch to process data packets at wire-speed based on one or more user defined packet policies, each user defined packet policy specifying information for one or more of Layers 4 through 7;

receiving a data packet at the multilayer switch, the data packet including information from one or more of Layers 2 through 7 of the OSI model;

determining if there is a match between the data packet and one or more packet policies, that assign a quality of service (QoS) metric to matching data packets;

if there is a matching packet policy assigning a QoS metric to the data packet,
determining a priority for the data packet based on the assigned QoS metric; and
routing the data packet using a Layer 2-3 switch based on the priority.

10. (Withdrawn) The method of claim 9, wherein the QoS metric specifies prioritization, bandwidth allocation, minimum bandwidth allocation, maximum bandwidth allocation, or network access permission for the data packet.

11. (Withdrawn) The method of claim 9, wherein assigning a QoS metric includes assigning a QoS metric based on application, application type, application port, physical port, elapsed time, time of day, day of week, date or time interval.

12. (Withdrawn) The method of claim 9, wherein assigning a QoS metric includes assigning a QoS metric for individual users, workgroups, VLAN, subnets, networks, IP addresses, IP address range, MAC addresses, and MAC address range.
13. (Canceled)
14. (Canceled)
15. (Canceled)
16. (Canceled)
17. (Canceled)
18. (Canceled)
19. (Withdrawn) A method for processing data packets in a computer network, comprising:
 - configuring a multilayer switch to process data packets at wire-speed based on one or more user defined packet policies, each user defined packet policy specifying information for one or more of Layers 4 through 7;
 - receiving a data packet at the multilayer switch, the data packet including information from one or more of Layers 2 through 7 of the OSI model;
 - determining if there is a match between the data packet and one or more of the packet policies, each packet policy specifying that surveillance is to be performed on the data packet;
 - if there is a matching packet policy specifying surveillance, mirroring the data packet to a specified location; and
 - processing the data packet using the multilayer switch.
20. (Withdrawn) The method of claim 19, wherein processing the data packet comprises:
 - routing the data packet using a Layer 2-3 switch.

21. (Currently Amended) A computer program product tangibly embodied in a computer readable ~~medium~~storage device, the computer program product comprising instructions operable to cause data processing equipment to:

configure a multilayer switch to process data packets at wire-speed based on one or more user defined packet policies, each user defined packet policy specifying information for one or more of Layers 4 through 7 and being active during one or more specified date or time intervals;

receive a data packet at the multilayer switch, the data packet including information from one or more of Layers 2 through 7 of the OSI model;

determine if there is a match between the data packet and one or more of the packet policies, each packet policy authorizing matching data packets to use the computer network;

if there is a matching packet policy authorizing the data packet, route the data packet using a Layer 2-3 switch; and

if there is no matching packet policy authorizing the data packet, block the data packet.

22. (Currently Amended) The computer program product of claim 21, wherein ~~the user defined packet policies include timed packet policies, the timed packet policies being active during specified date or time intervals, and the instructions for determining if there is at least one matching packet policy causes~~ the data processing equipment to:

determine if there is a currently active timed matching policy.

23. (Original) The computer program product of claim 21, wherein the user defined packet policies authorize data packets being transmitted or received by authorized users, applications, physical ports, application ports, IP addresses, or MAC addresses.

24. (Original) The computer program product of claim 21, wherein the instructions for blocking the data packet cause the data processing equipment to:

discard the data packet, log the data packet, or forward the data packet to a multilayer switch application for processing.

25. (Currently Amended) A computer program product tangibly embodied in a computer readable ~~medium~~storage device, the computer program product comprising instructions operable to cause data processing equipment to:

configure a multilayer switch to process data packets at wire-speed based on one or more user defined packet policies, each user defined packet policy specifying information for one or more of Layers 4 through 7;

receive a data packet at the multilayer switch, the data packet including information from one or more of Layers 2 through 7 of the OSI model;

determine if there is a match between the data packet and one or more packet policies that specify a second packet policy to be applied to the matching data packets, the second packet policy having one or more policy action fields; and

if there is a matching packet policy specifying a second packet policy, process the data packet based on the policy action fields of the second packet policy.

26. (Original) The computer program product of claim 25, wherein the matching packet policy specifies the application of a preexisting second packet policy, and the instructions for processing the data packet cause the data processing equipment to:

identify the preexisting second packet policy specified by the matching packet policy;
and

process the data packet based on the policy action fields of the preexisting second packet policy.

27. (Original) The computer program product of claim 25, wherein the matching packet policy specifies the application of a dynamically created second packet policy, and the instructions for processing the data packet cause the data processing equipment to:

create the second packet policy specified by the matching packet policy; and
process the data packet based on the policy action fields of the created second packet policy.

28. (Original) The computer program product of claim 25, wherein the instructions for processing the data packet cause the data processing equipment to:

routing the data packet using a Layer 2-3 switch.

29. (Withdrawn) A computer program product tangibly embodied in a computer readable medium, the computer program product comprising instructions operable to cause data processing equipment to:

configure a multilayer switch to process data packets at wire-speed based on one or more user defined packet policies, each user defined packet policy specifying information for one or more of Layers 4 through 7;

receive a data packet at the multilayer switch, the data packet including information from one or more of Layers 2 through 7 of the OSI model;

determine if there is a match between the data packet and one or more packet policies, that assign a quality of service (QoS) metric to matching data packets;

if there is a matching packet policy assigning a QoS metric to the data packet, determine a priority for the data packet based on the assigned QoS metric; and

route the data packet using a Layer 2-3 switch based on the priority.

30. (Withdrawn) The computer program product of claim 29, wherein the QoS metric specifies prioritization, bandwidth allocation, minimum bandwidth allocation, maximum bandwidth allocation, or network access permission for the data packet.

31. (Withdrawn) The computer program product of claim 29, wherein assigning a QoS metric includes assigning a QoS metric based on application, application type, application port, physical port, elapsed time, time of day, day of week, date or time interval.

32. (Withdrawn) The method of claim 9, wherein assigning a QoS metric includes assigning a QoS metric for individual users, workgroups, VLAN, subnets, networks, IP addresses, IP address range, MAC addresses, and MAC address range.

33. (Canceled)

34. (Canceled)

35. (Canceled)

36. (Canceled)

37. (Canceled)

38. (Canceled)

39. (Withdrawn) A computer program product tangibly embodied in a computer readable medium, the computer program product comprising instructions operable to cause data processing equipment to:

configure a multilayer switch to process data packets at wire-speed based on one or more user defined packet policies, each user defined packet policy specifying information for one or more of Layers 4 through 7;

receive a data packet at the multilayer switch, the data packet including information from one or more of Layers 2 through 7 of the OSI model;

determine if there is a match between the data packet and one or more of the packet policies, each packet policy specifying that surveillance is to be performed on the data packet;

if there is a matching packet policy specifying surveillance, mirror the data packet to a specified location; and

process the data packet using the multilayer switch.

40. (Withdrawn) The computer program product of claim 39, wherein the instructions for processing the data packet cause the data processing equipment to:

route the data packet using a Layer 2-3 switch.